



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

D3259-7

Job Sheet 181225



Part No: D3259-7

Job Qty: 6 ea

Part Name: Door



Part Weight: 0 lbs

Status: Scheduled

Priority: Medium

Job Created: 7/24/18

Job Tracking No:

Due Date: 8/31/18

Created By: Marie Lajeunesse

Type: Stock

Description:

Note: DWG REV B IPP Rev:A New Issue 07-07-19 JLM Verified By:EC IPP REV B:AS PER REV B 10-05-19 JLM
VERIFIED BY:EC

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup hrs	Run Hrs	Workcenter / Supplier	Lead Time	
90	Start up Operation	6 Ea	8/31/18	8/31/18	0.00	0.00	Start Up Waterjet		SC 18/08/23
100	Waterjet	6 pcs	8/31/18	8/31/18	0.00	0.73	Waterjet1		SC 19/08/23
120	QC	6 pcs	8/31/18	8/31/18	0.00	0.00	QC8		AUG 24 2018 38
130	HandFinish	6 pcs	8/31/18	8/31/18	0.00	0.29	HandFinish1		D.R 18/08/23
140	QC	6 pcs	8/31/18	8/31/18	0.00	0.00	QC3		AUG 24 2018 38
150	Packaging	6 pcs	8/31/18	8/31/18	0.00	0.00	Packaging3	5490	DAS 9-89
160	QC21-SA	6 Ea	8/31/18	8/31/18	0.00	0.00	QC21		AUG 27 2018 89

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
M2024T3S.063	2024-T3 .063 Sheet	8.3280 sf (1.388 ea)	90-Start up Operation	

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
90-Start up Operation	M2024T3S.063	8	191	0

Part Specifications

Spec No	Description	Target/Tolerance	Limits	Type	Special Comments
1	Door	9.000inches ± 0.005	9.005 8.995	9,002	
2	Door	1.000inches ± 0.005	1.005 0.995	1,001	
3	Door	0.260inches ± 0.010	0.270 0.250	0,264	
4	Door	0.130inches ± 0.010	0.140 0.120	0,135	
5	Door	5.960inches ± 0.010	5.970 5.950	5,962	
6	Door	0.548inches ± 0.010	0.558 0.538	0,550	
7	Door	0.313inches	0.318	0,313	

QA Closed: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



Work Order update only

Work Order: _____		DISPOSITION		AGAINST DEPARTMENT/PROCESS																																																											
Part No. _____		Rework ☐		Skid-tube ☐		Cross tube ☐		Water Jet ☐		Engineering ☐																																																					
NCR No. _____		Scrap ☐		Machining ☐		Small Fab ☐		Prod. Eng. Coord. ☐		Quality ☐																																																					
		Suspect ☐		Thermoforming ☐		Finishing ☐		Rec/Store/Packaging ☐		Other ☐																																																					
Date : _____		Step #: _____		MRB (QSI042) Approval _____																																																											
Description Work Order Deviation _____																																																															
 Completed By _____ Hand / Supervisor _____ Approval Verification _____ IC / QA Coordinator Approval _____ DART AEROSPACE Container No: S104735 Part: D3259-7 Job No: 181225 Serial No/Batch: S104735 Revision: _____ Inspector: _____ Exp Date: _____ Instructions: Various STC's Date: 08/23/18 Dart Aerospace Ltd. 1220 Aberdeen Street Markham, Ontario CANADA L3R 9V7 TEL: 1 613 632-5200 Email: sales@dartaero.com www.dartaerospace.com <table border="1" style="width: 100%;"> <thead> <tr> <th colspan="4">Root Cause</th> </tr> </thead> <tbody> <tr> <td>Environment ☐</td> <td>No Re-verification ☐</td> <td>Pi ☐</td> <td>Positioned Wrong ☐</td> </tr> <tr> <td>Design ☐</td> <td>Operator ☐</td> <td>Bending ☐</td> <td>Outside Dimensions ☐</td> </tr> <tr> <td>Doc/Data ☐</td> <td>Offset/Setup ☐</td> <td>Centre Not Concentric ☐</td> <td>Over/Under tolerance ☐</td> </tr> <tr> <td>Equip/Tooling ☐</td> <td>Supplier ☐</td> <td>Cracks ☐</td> <td>Part Incorrect ☐</td> </tr> <tr> <td>Handling/Pre ☐</td> <td>Training ☐</td> <td>Crimp/Kink/Ripple/Wave ☐</td> <td>Part Lost/Missing ☐</td> </tr> <tr> <td>Material ☐</td> <td>Use for Testing ☐</td> <td>Cuffs ☐</td> <td>Part Moved ☐</td> </tr> <tr> <td>Internal Transport ☐</td> <td>Poor Information ☐</td> <td>Crushing ☐</td> <td>Drawing ☐</td> </tr> <tr> <td>Tribal Knowledge ☐</td> <td>Rushing ☐</td> <td>Heat Treat ☐</td> <td>Finish ☐</td> </tr> <tr> <td>LOA ☐</td> <td>Product Improvement ☐</td> <td>Wave/Twist in Tube ☐</td> <td>Misread ☐</td> </tr> <tr> <td>Substation ☐</td> <td>Process Improvement ☐</td> <td>Marks/Chatter ☐</td> <td>Turning Sequence ☐</td> </tr> <tr> <td>Past Expiry Date ☐</td> <td>Manufacturing Process ☐</td> <td colspan="2"></td> </tr> <tr> <td>Misidentified ☐</td> <td>Past Due ☐</td> <td colspan="2">OTHER : _____</td> </tr> </tbody> </table>												Root Cause				Environment ☐	No Re-verification ☐	Pi ☐	Positioned Wrong ☐	Design ☐	Operator ☐	Bending ☐	Outside Dimensions ☐	Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	Over/Under tolerance ☐	Equip/Tooling ☐	Supplier ☐	Cracks ☐	Part Incorrect ☐	Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Part Lost/Missing ☐	Material ☐	Use for Testing ☐	Cuffs ☐	Part Moved ☐	Internal Transport ☐	Poor Information ☐	Crushing ☐	Drawing ☐	Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Finish ☐	LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Misread ☐	Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Turning Sequence ☐	Past Expiry Date ☐	Manufacturing Process ☐			Misidentified ☐	Past Due ☐	OTHER : _____	
Root Cause																																																															
Environment ☐	No Re-verification ☐	Pi ☐	Positioned Wrong ☐																																																												
Design ☐	Operator ☐	Bending ☐	Outside Dimensions ☐																																																												
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	Over/Under tolerance ☐																																																												
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Part Incorrect ☐																																																												
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Part Lost/Missing ☐																																																												
Material ☐	Use for Testing ☐	Cuffs ☐	Part Moved ☐																																																												
Internal Transport ☐	Poor Information ☐	Crushing ☐	Drawing ☐																																																												
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Finish ☐																																																												
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Misread ☐																																																												
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Turning Sequence ☐																																																												
Past Expiry Date ☐	Manufacturing Process ☐																																																														
Misidentified ☐	Past Due ☐	OTHER : _____																																																													

			+ 0.005	0.313	
			- 0.000		
8	Door	0.098inches	+ 0.005	0.103	0,099
			- 0.000	0.098	
9	Door	0.460inches	± 0.030	0.490	0,467
				0.430	
10	Door	0.063inches	± 0.010	0.073	0,062
				0.053	
11	Door	13.330inches	± 0.030	13.360	13,333
				13.300	

Plex 7/24/18 9:39 AM Dart.lajeunesse.marie

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>				Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐																																																			
Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐																																																																				
Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐																																																																				
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐																																																																				
Large Fab ☐	Composite ☐	Supplier ☐																																																																					
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval																																																																			
Description Work Order Deviation			Disposition		Completed By																																																																		
					Lead hand / Supervisor Approval Verification																																																																		
					QC / QA Coordinator Approval																																																																		
Root Cause <table style="width:100%; border: none;"> <tr> <td style="border: none;">Environment ☐</td> <td style="border: none;">No Re-verification ☐</td> <td style="border: none;">Pressure/Forced ☐</td> </tr> <tr> <td style="border: none;">Design ☐</td> <td style="border: none;">Operator ☐</td> <td style="border: none;">Bending ☐</td> </tr> <tr> <td style="border: none;">Doc/Data ☐</td> <td style="border: none;">Offset/Setup ☐</td> <td style="border: none;">Centre Not Concentric ☐</td> </tr> <tr> <td style="border: none;">Equip/Tooling ☐</td> <td style="border: none;">Supplier ☐</td> <td style="border: none;">Cracks ☐</td> </tr> <tr> <td style="border: none;">Handling/Pre ☐</td> <td style="border: none;">Training ☐</td> <td style="border: none;">Crimp/Kink/Ripple/Wave ☐</td> </tr> <tr> <td style="border: none;">Material ☐</td> <td style="border: none;">Use for Testing ☐</td> <td style="border: none;">Cuffs ☐</td> </tr> <tr> <td style="border: none;">Internal Transport ☐</td> <td style="border: none;">Poor Information ☐</td> <td style="border: none;">Crushing ☐</td> </tr> <tr> <td style="border: none;">Tribal Knowledge ☐</td> <td style="border: none;">Rushing ☐</td> <td style="border: none;">Heat Treat ☐</td> </tr> <tr> <td style="border: none;">LOA ☐</td> <td style="border: none;">Product Improvement ☐</td> <td style="border: none;">Wave/Twist in Tube ☐</td> </tr> <tr> <td style="border: none;">Substation ☐</td> <td style="border: none;">Process Improvement ☐</td> <td style="border: none;">Marks/Chatter ☐</td> </tr> <tr> <td style="border: none;">Past Expiry Date ☐</td> <td style="border: none;">Manufacturing Process ☐</td> <td></td> </tr> <tr> <td style="border: none;">Misidentified ☐</td> <td style="border: none;">Past Due ☐</td> <td></td> </tr> </table>			Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Design ☐	Operator ☐	Bending ☐	Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	Equip/Tooling ☐	Supplier ☐	Cracks ☐	Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Material ☐	Use for Testing ☐	Cuffs ☐	Internal Transport ☐	Poor Information ☐	Crushing ☐	Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Past Expiry Date ☐	Manufacturing Process ☐		Misidentified ☐	Past Due ☐		FAULT CATEGORY <table style="width:100%; border: none;"> <tr> <td style="border: none;">Temperature/Cure ☐</td> <td style="border: none;">Power Loss/Surge ☐</td> <td style="border: none;">Positioned Wrong ☐</td> </tr> <tr> <td style="border: none;">Set-up ☐</td> <td style="border: none;">Folio/Program ☐</td> <td style="border: none;">Outside Dimensions ☐</td> </tr> <tr> <td style="border: none;">BOM/Route ☐</td> <td style="border: none;">Grain ☐</td> <td style="border: none;">Over/Under tolerance ☐</td> </tr> <tr> <td style="border: none;">Broken/Damage/Defect ☐</td> <td style="border: none;">Weld ☐</td> <td style="border: none;">Part Incorrect ☐</td> </tr> <tr> <td style="border: none;">Inspection Incomplete/Unqualified ☐</td> <td style="border: none;">Wrong Stock Pulled ☐</td> <td style="border: none;">Part Lost/Missing ☐</td> </tr> <tr> <td style="border: none;">Contamination ☐</td> <td style="border: none;">Out of Sequence ☐</td> <td style="border: none;">Part Moved ☐</td> </tr> <tr> <td style="border: none;">Countersink ☐</td> <td style="border: none;">Off-set ☐</td> <td style="border: none;">Drawing ☐</td> </tr> <tr> <td style="border: none;">Cut Too Short ☐</td> <td style="border: none;">Mislabeled ☐</td> <td style="border: none;">Finish ☐</td> </tr> <tr> <td style="border: none;">Instructions Incomplete/Unclear ☐</td> <td style="border: none;">Fit/Function ☐</td> <td style="border: none;">Misread ☐</td> </tr> <tr> <td style="border: none;">Drill Holes ☐</td> <td style="border: none;">Misaligned/off center ☐</td> <td style="border: none;">Turning Sequence ☐</td> </tr> </table>			Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐	Countersink ☐	Off-set ☐	Drawing ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐
Environment ☐	No Re-verification ☐	Pressure/Forced ☐																																																																					
Design ☐	Operator ☐	Bending ☐																																																																					
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐																																																																					
Equip/Tooling ☐	Supplier ☐	Cracks ☐																																																																					
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐																																																																					
Material ☐	Use for Testing ☐	Cuffs ☐																																																																					
Internal Transport ☐	Poor Information ☐	Crushing ☐																																																																					
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐																																																																					
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐																																																																					
Substation ☐	Process Improvement ☐	Marks/Chatter ☐																																																																					
Past Expiry Date ☐	Manufacturing Process ☐																																																																						
Misidentified ☐	Past Due ☐																																																																						
Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐																																																																					
Set-up ☐	Folio/Program ☐	Outside Dimensions ☐																																																																					
BOM/Route ☐	Grain ☐	Over/Under tolerance ☐																																																																					
Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐																																																																					
Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐																																																																					
Contamination ☐	Out of Sequence ☐	Part Moved ☐																																																																					
Countersink ☐	Off-set ☐	Drawing ☐																																																																					
Cut Too Short ☐	Mislabeled ☐	Finish ☐																																																																					
Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐																																																																					
Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐																																																																					
OTHER : _____																																																																							